ITEM 504

FIELD OFFICE AND LABORATORY

504.1. Description. Provide field offices and laboratories.

504.2. Equipment.

A. General. Furnish facilities after the receipt of the work order to begin work and before beginning physical work on the project. Provide field offices of the type and number specified near the worksite at a location acceptable to the Engineer. The Contractor may make use of permanent buildings or rental space meeting the requirements for field offices instead of portable buildings if approved. Maintain the field office until the Department accepts the project. Furnish other equipment as required.

Provide inspection laboratories of the type specified before beginning the fabrication of products required by the Contract. Locate the building so that plant operations are visible from the building. Maintain the laboratories until the production of the associated product is complete.

Immediately repair or replace the facility if it is damaged in any manner. Payment for repair will not be made unless it is the result of negligence by the Department. Reimburse the Department for equipment damaged by the Contractor’s operations. When facilities are allowed in the right of way, remove buildings and other facilities and restore the right of way before project acceptance.

1. Parking and Fencing. Unless otherwise shown on the plans, provide an all-weather parking area for the sole use of at least 2 State-owned vehicles. Situate the area near the field office or laboratory at a location acceptable to the Engineer. Maintain the parking area until the project is completed and restore the area to a condition acceptable to the Engineer upon project completion.

When shown on the plans, enclose the field office or laboratory and the parking area with a 6-ft. chain-link fence, a top-mounted 3-strand barbed wire, and a 12-ft. gate.

2. Buildings.

a. Field Office. Provide field offices with roofs, floors, doors, and screened windows. Ensure the floor is of sufficient strength to support testing equipment and has an impervious floor covering. If the Contractor uses part of the structure, do not interconnect the field office with Contractor-used rooms. Ensure that the field office is weatherproof, piped for water and fuel, and electrically wired by personnel meeting the requirements of Article 7.15, “Electrical Requirements.”

Furnish and install adequate equipment, outlets, lighting, air conditioning, heating, and ventilation. Provide a partitioned rest room furnished with rest room supplies, a lavatory and a flush toilet connected to a sewer or septic tank. A portable toilet may be used when approved by the Engineer.

Provide secured and controlled access to the field office or laboratory through the use of security measures such as bars, alarms, or security fencing. Furnish steps to the building if deemed necessary by the Engineer.

b. Laboratory. Provide laboratories with all of the requirements described in Section 504.2.A.2.a, “Field Office.” In addition, provide the following items unless otherwise directed:

- laboratory equipment necessary for testing when shown on the plans;
- water (for testing purposes) from an approved source;
- an exhaust fan for concrete curing, asphalt, or other operations to meet Department and OSHA requirements (Vent all exhaust to the outside of the structure.);
- a work platform at least 18 in. long and 12 in. wide, mounted on a lumber post at least 6 in. by 6 in. extending through the floor and firmly fixed in the ground (The work
platform support can be provided by other methods as shown on the plans or as directed.

- a minimum of 20 ft. of total work counter length at least 3 ft. wide and 3 ft. above the floor and of sufficient strength to support required testing equipment; and
- a laboratory sink measuring 24 in. by 30 in. and 12 in. in depth.

3. Field Office and Laboratory Appurtenances. Provide workbenches and tables at least 3 ft. wide and 6 ft. long, chairs, and filing cabinets in the quantity acceptable to the Engineer. Provide solar screens, blinds, or shades if deemed necessary by the Engineer. Provide potable water, electricity, collection and disposal of trash, and janitorial services acceptable to the Engineer.

Provide a telephone and telephone service unless otherwise directed. A cell phone may be provided to meet this requirement.

Provide a paper copier and facsimile when required by the plans.

For Contracts that require a nuclear gauge for moisture or density determination, provide a closet within the facility or a separate structure for storage of the gauge as far as possible from the normal office work. For all doors allowing access to the nuclear gauge, provide internal keyed deadbolt locks and hinges with pins on the inside of the storage area.

Provide any or all of the following, as shown on the plans and in accordance with DMS-10101, “Computer Equipment”:

- computers (laptop or desktop),
- printers, and
- Internet service. The Internet service must be a provided on a line separate from required phone service.

B. Structure Types.

1. Type A Structure (Field Laboratory). Provide at least 200 sq. ft. of gross floor area in rooms 8 ft. high. Partition the building into at least 2 rooms, each furnished with an exterior door and at least 2 windows.

2. Type B Structure (Field Office and Laboratory). Provide at least 600 sq. ft. of gross floor area in rooms 8 ft. high. Partition the floor area into at least 3 interconnected rooms with doors, 2 exterior doors, and at least 2 windows in each room.

3. Type C Structure (Field Office). Provide at least 400 sq. ft. of gross floor area in rooms 8 ft. high. Partition the floor area into at least 2 interconnected rooms with doors, 2 exterior doors, and at least 2 windows in each room.

4. Type D Structure (Asphalt Mix Control Laboratory). Provide at least 700 sq. ft. of gross floor area in rooms 8 ft. high. Partition the floor area into at least 2 interconnected rooms with doors, 2 exterior doors, and at least 2 windows in each room.

   a. Asphalt Content by Extraction. If the asphalt content will be determined by extraction, equip the laboratory portion of this structure with an exhaust fan of sufficient capacity to evacuate the fumes generated by the asphalt extraction procedure. Provide an exhaust fan with an explosion-proof motor capable of reducing fume concentrations to levels below OSHA maximums. Locate the fan below the workbench in the extraction area and exhaust to the outside.

      Vent the oven used to dry extracted aggregates to the outside.

   b. Asphalt Content by Ignition Method. If the asphalt content will be determined by the ignition method, provide sufficient power ventilation for the room, a NEMA 6-50R (208/240 V, 50 A) outlet within 3 ft. of the ignition oven location, and an independent exhaust outlet no farther than 8 ft. from the oven. Provide a surface for the ignition oven that is level, sturdy, and fireproof with at least 6 in. of clearance between the furnace and other vertical surfaces.

      Vent the ignition oven to the outside.

5. Type E Structure. Provide building as shown on plans.
504.3. Measurement and Payment. The work performed, materials furnished, utilities and utility service (including phone when required), appurtenances (including computers, office equipment and Internet service), testing equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.